



STATE OF MICHIGAN

DEPARTMENT OF TECHNOLOGY, MANAGEMENT & BUDGET

LANSING

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FEB 24 2015

January 21, 2015

Jeffery Bankowski, Director
Office of Internal Audit Services
State Budget Office
George W. Romney Building
111 South Capitol, 6th Floor
Lansing, Michigan 48913

Dear Mr. Bankowski:

In accordance with the State of Michigan, Financial Management Guide, Part VII, attached is a summary table identifying our responses and corrective action plans to address recommendations contained within the Office of the Auditor General's performance audit report of the Enterprise Data Warehouse (EDW).

Questions regarding the summary table or corrective action plans should be directed to me.

Sincerely,

Signature Redacted

Michael Gilliland, Director
DTMB Financial Services

c: Rep. Al Pscholka, Chair, House Appropriations
Senator Dave Hildenbrand, Chair, Senate Appropriations
Mark Freeman, Office of the Auditor General
Dennis Muchmore, Executive Office
Dick Posthumus, Executive Office
House Fiscal Agency
Senate Fiscal Agency
Rodney Davenport, DTMB
Judy Odett, DTMB
Dick Novello, DTMB
John Juarez, DTMB
Rick Lowe, SBO
Scott Starr, DTMB
Caleb Buhs, DTMB

State of Michigan
Department of Technology, Management and Budget
Enterprise Data Warehouse (EDW)

Summary of Agency Responses to Recommendations

1. Audit recommendations DTMB fully complied with: None
2. Audit recommendations DTMB agrees with and will comply: #1, #2, #3, #4
3. Audit recommendations DTMB disagrees with: None

Agency Plan to Address the Recommendations

Recommendation No. 1: Interface Controls.

DTMB, in conjunction with State agencies, agrees with the recommendation.

DTMB has updated the Enterprise Data Warehouse Guidelines for Best Practices, to include new recommendations for interface controls. The document's Extract, Transform, and Load (ETL) Best Practices section includes strategy, design and reconciliation controls that are in accordance with FISCAM.

Also, DTMB is partnering with DHS to create an interface strategy and design for each DHS EDW interface and all new tables will have documentation for interface and design. In addition, the departments will ensure effective controls are in place between the source and target systems (for control totals, record counts, hash totals, batch run totals, etc.). DTMB will also partner with DCH and the DCH data warehouse vendor to update interface documentation where gaps exist.

In addition, the Department of Treasury, prior to the start of the audit, had identified interface controls as an area for improvement and had begun work with DTMB to ensure that control reports are available and legacy (mainframe) data is transferred completely, accurately, and timely to the data warehouse. The Department of Treasury and DTMB have developed a reconciliation process that will be applied across all interfaces moving data to Treasury's EDW environment. DTMB, in conjunction with State agencies will comply with the recommendation by June 30, 2015.

Recommendation No. 2: Governance Structure.

DTMB, in conjunction with State agencies, agrees with the recommendation.

DTMB established an Enterprise Information Management (EIM) Steering Committee, in response to Executive Directive 2013-1, which is comprised of eight departments that are currently engaged in numerous aspects of data sharing. The EIM Steering Committee is actively developing the foundation of an EIM program, including a legal framework, roles and responsibilities, organizational processes, data governance framework, and a data sharing template. The EIM foundation will be completed by December 31, 2014, and presented to the Michigan Information Management Governing Board, comprised of directors or chief deputy directors of all state departments, for their review and approval in early 2015. These foundational components will be in place by March 31, 2015.

Also, the Department of Treasury, prior to the start of the audit, established a governance structure, which is defined in the Treasury Data Governance Program Charter, identifying and defining the roles of the executive sponsors, Data Governance Steering Committee, Projects and Process Sub-Committee and Data Governance User Group. Going forward, the Department of Treasury will add Appendix K. for their EDW environment to its partnership agreement with DTMB to address the roles and responsibilities between an agency and DTMB, problem management and escalation, as well as baseline service level targets. DTMB, in conjunction with State agencies will comply with the recommendation by September 30, 2015.

Recommendation No. 3: User Access Controls.

State agencies, in conjunction with DTMB, agree with the recommendation and will work together to improve user access controls over the EDW.

The departments have already restricted or revoked the user access rights for those users identified in the audit report, which did not require the access rights to complete their job responsibilities. The departments are working to revise access request forms, ensure that appropriate access rights are granted and periodically reviewed, and ensure that approvals are captured and documented. DTMB has updated the Enterprise Data Warehouse Guidelines for Best Practices to provide agencies with guidelines to perform periodic reviews to verify that appropriate privileges are granted to authorized users. In addition, DTMB will analyze the access rights associated with the PUBLIC account and will restrict the rights to ensure that they comply with the principle of least privilege. All access rights associated with the PUBLIC account will be reviewed periodically.

In addition, DCH performs periodic reviews of user access controls, including a full review which was conducted in 2012. However, DCH acknowledges that its policy does not stipulate the frequency of the periodic reviews. DCH will modify its policy to incorporate periodic reviews of EDW access rights. Also, DCH's Database Security Application functionality is being enhanced to include automatically initiated renewal requests for users on an annual basis. DTMB, in conjunction with State agencies will comply with the recommendation by June 30, 2015.